i) contacting said test compound and angiostatin with ATP synthase, or alpha and/or beta subunits thereof, under conditions such that angiostatin can bind to said ATP synthase, or alpha and/or beta subunits thereof, in the absence of said test compound, and

ii) determining the amount of angiostatin bound to said ATP synthase, or alpha and/or beta subunits thereof, and comparing that amount of an amount of angiostatin bound to said ATP synthase, or alpha and/or beta subunits portion thereof, in the absence of said test compound,

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wherein a reduction in the amount of angiostatin bound to said ATP synthase, or alpha and/or beta subunits thereof, in the presence of said test compound indicates that said test compound inhibits the binding of angiostatin to said ATP synthase, or alpha and/or beta subunits thereof, and

wherein an increase of the amount of angiostatin bound to said ATP synthase, or alpha and/or beta subunits thereof, in the presence of said test compound indicates that said test compound enhances the binding of angiostatin to said ATP synthase, or alpha and/or beta subunits thereof.

A2

3. (Amended) The method of claim 1 wherein said ATP synthase, or alpha and/or beta subunits thereof, is attached to a solid support.

4. (Amended) The method of claim 1 wherein said ATP synthase, or alpha and/or beta subunits thereof, is associated with a lipid membrane.

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5. (Amended) The method of claim 1 wherein said ATP synthase, or alpha and/or beta subunits thereof, is a membrane of a live cell.

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7. (Amended) The method of claim 5 wherein said cell has been transformed with a nucleic acid sequence that enclosed said ATP synthase, or alpha and/or beta subunits thereof.

8. (Amended) A method of screening a test compound for its ability to promote or inhibit angiogenesis resulting from binding of angiostatin to ATP synthase comprising:

i) contacting said test compound and angiostatin with a cell that expresses ATP synthase, or alpha and/or beta subunits thereof, under conditions such that angiostatin can bind to said ATP synthase, or alpha and/or beta subunits thereof, in the absence of said test compound, and

ii) determining the amount of angiostatin required to achieve the same effect on angiogenesis in the presence of said test compound as in the absence of said test compound,

wherein a reduction in the amount of angiostatin required to achieve the same effect on angiogenesis in the presence of said test compound indicates that said test compound is an angiostatin agonist, and

wherein an increase of the amount of angiostatin required to achieve the same effect on angiogenesis in the presence of said test compound indicates that said test compound is an angiostatin antagonist.

9. (Amended) The method of claim 8, wherein said inhibition of angiogenesis results in the inhibition of cell proliferation.

10. (Amended) A method of screening a test compound for its ability to inhibit or enhance proton pumping resulting from binding of angiostatin to ATP synthase comprising:

i) contacting said test compound and angiostatin with a cell that expresses ATP synthase, or alpha and/or beta subunits thereof, under conditions such that angiostatin can bind to said ATP synthase, or alpha and/or beta subunits thereof, in the absence of said test compound, and

ii) determining the amount of angiostatin required to achieve the same effect on proton pumping in the presence of said test compound as in the absence of said test compound,

wherein a reduction in the amount of angiostatin required to achieve the same effect on proton pumping in the presence of said test compound indicates that said test compound is an angiostatin agonist, and

wherein an increase of the amount of angiostatin required to achieve the same effect on proton pumping in the presence of said test compound indicates that said test compound is an angiostatin antagonist.

Remarks

Reconsideration of this application and entry of the foregoing amendments are respectfully requested.

The above identified application is directed to screening methods a) identifying compounds that bind to the angiostatin receptor and b) determining the ability of compounds to promote or inhibit angiogenesis (page 16, lines 1-2) or inhibit or enhance proton pumping (page 18, lines 3-21).

Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 1-7, 10 and 13-14 have been rejected under 35 U.S.C. § 112, second paragraph as indefinite. These rejections are respectfully traversed as applied to the amended claims.